## Valdez, Heather

From: Coss, Pablo M (DEC) <moses.coss@alaska.gov>

Sent: Thursday, February 19, 2015 11:15 AM

**To:** Pavitt, John

Cc: Batchelder, Amber L (DEC); Valdez, Heather; Hedgpeth, Zach

Subject:RE: Pogo Mine Subpart CCCC Source TestAttachments:AQ406MSS07 Dec9,2014 STR\_536838.pdf

Categories: Pogo FOIA

John,

Attached is the entire source test report.

My best,

Moses

From: Pavitt, John [mailto:Pavitt.John@epa.gov] Sent: Thursday, February 19, 2015 7:49 AM

To: Coss, Pablo M (DEC)

Cc: Batchelder, Amber L (DEC); Valdez, Heather; Hedgpeth, Zach

Subject: RE: Pogo Mine Subpart CCCC Source Test

Hello Moses. We will need to see the full test report. We're interested to see the operating data to help us consider the NOx results. What was going on with the scrubber while the testing was happening? Was there some sort of malfunction during these higher concentrations? A change in the waste feed or energy consumption rate?

Thanks,

John Pavitt US EPA Region 10, Alaska Operations Office (907) 271-3688

From: Coss, Pablo M (DEC) [mailto:moses.coss@alaska.gov]

Sent: Wednesday, February 18, 2015 6:02 PM

To: Pavitt, John

Cc: Batchelder, Amber L (DEC)

**Subject:** Pogo Mine Subpart CCCC Source Test

Good afternoon John,

Sumitomo Metal Mining Pogo LLC conducted a source test on Unit 412, a permanent camp incinerator, at Pogo Mine. According to the source test report, the test was conducted in order "to demonstrate compliance and effectiveness of the Unit 412 recently installed pollution control equipment and compliance with the CISWI rule emission standards. The field measurements of Unit 412 include the following:" PM, NOx, Dioxins and Furans, Cadmium, Mercury, SO2, CO, HCl, Lead and Fugitive Ash (visible emissions).

Instead of conducting the **minimum** 3 runs required by 40 CFR 60.2125(a) for the CEMS tests, Pogo Mine conducted 10 runs. The concentrations for the aforementioned runs result in a 3-run average of 173.2 ppmvd. The results of all 10 runs are displayed below. 40 CFR 60.2125(a) states that all performance tests must consist of a **minimum of three test runs** conducted under conditions representative of normal operations.

Regarding the averaging period, Table 8 to Subpart CCCC states that for the air pollutant: Oxides of Nitrogen, you must meet this emissions limitation: **170 ppmv using this averaging time: 3-run average** (for Method 7E, 1 hour minimum sample time per run). All emission limitations are measured at 7 percent oxygen, dry basis at standard conditions.

Is it possible to average more than 3 runs to comply with the 170 ppmvd NOx limit that according to Table 8 is based on 3 runs, or can any 3 consecutive runs be averaged to determine compliance with the 170 ppmvd NOx limit. As stated earlier Table 8 to Subpart CCCC seems to indicate that the compliance determination is based on a 3 run average, however, a minimum of three runs is required by 40 CFR 60.2125(a).

Table 2-6 Unit 412 Continuous Emission Monitoring System Results

Date	Run	Isokinetic	Flow	02	CO2	NO <sub>x</sub>			co			SO <sub>2</sub>		
	Time	Run	(dscfm)	(%)	(96)	(ppm)	(ppm@7%O <sub>2</sub> )	(lb/hr)	(ppm)	(ppm@7%O₂)	(lb/hr)	(ppm)	(ppm@7%O <sub>2</sub> )	(lb/hr)
10/07/14	0905-1005	15-1	1,210	15.03	4.34	30.8	72.9	0.27	0.9	2.1	0.00	0.0	0.0	0.00
10/07/14	1121-132	1 129-1	1,217	15.65	4.01	48.3	127.9	0.42	0.9	2.4	0.00	0.0	0.0	0.00
10/07/14	1426-1626	123-1	1,289	16.30	3.68	36.1	109.1	0.33	1.8	5.4	0.01	0.0	0.0	0.00
10/07/14	1717-181	15-2	1,206	15.88	3.87	60.7	168.1	0.52	1.3	3.6	0.01	0.1	0.3	0.00
Average			1,231	15.72	3.98	44.0	119.5	0.39	1.2	3.4	0.01	0.0	0.1	0.00
10/08/14	0818-1017	129-2	1,219	15.19	4.32	41.4	100.8	0.36	1.7	4.1	0.01	0.0	0.0	0.00
10/08/14	1111-131	0 123-2	1,156	14.97	4.45	71.2	166.9	0.59	1.4	3.3	0.01	0.0	0.0	0.00
10/08/14	1404-1604	129-3	1,192	15.41	4.15	73.8	186.9	0.63	1.9	4.8	0.01	0.0	0.0	0.00
10/08/14	1636-1736	15-3	1,245	15.93	3.96	59.3	165.8	0.53	1.3	3.6	0.01	0.0	0.0	0.00
Average			1,203	15.38	4.22	61.4	155.1	0.53	1.6	4.0	0.01	0.0	0.0	0.00
10/09/14	0830-1030	123-3	1,640	15.55	4.28	45.4	118.0	0.53	1.4	3.6	0.01	0.0	0.0	0.00
10/09/14	1115-121	5 15-4	1,268	16.06	3.90	47.7	137.0	0.43	1.1	3.2	0.01	0.0	0.0	0.00
Average			1,454	15.81	4.09	46.6	127.5	0.48	1.3	3.4	0.01	0.0	0.0	0.00
Average Runs 10/7/14-10/9/14			1,264	15.60	4.10	51.5	135.3	0.46	1.4	3.6	0.01	0.0	0.0	0.00

If the standard listed in Table 8 is literally based on a 3 run average, it seems that Pogo Mine may have violated the 170 ppmvd NOx limit during runs 6 – 8. If it's ok to obtain alternative results by averaging more than 3 runs, the column header of Table 8 of the NSPS Subpart CCCC standard should probably read "minimum 3 run average" instead if "3 run average".

Would you please provide us w/ EPA's perspective on this?

My best,

Moses Coss ADEC 451-2163